

Missouri Assessment Program Spring 2005

Mathematics

Released Items

Grade 10

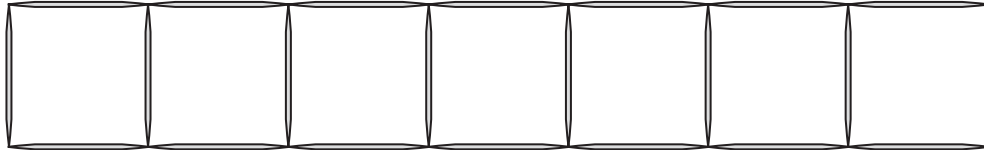
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Students were asked to make a row of squares using toothpicks. The diagram below shows the arrangement of toothpicks for the first 7 squares.



How many toothpicks will it take to make a row of 100 squares? In the space below, use words, numbers, or symbols to justify your answer and write your answer on the line.

_____ toothpicks

Go On ►

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Dan called a tow truck company to tow his car. The company charges a fee of \$22.00 plus \$2.00 per mile for each mile towed. On the line below, write an equation that will allow Dan to calculate the total towing bill (y) when he knows the number of miles towed (x).

equation _____

If Dan's towing bill was \$86.00, how many miles was his car towed? In the space below, provide the work that shows how you arrived at your answer and write your answer on the line.

_____ miles